Journal of Family Violence (2021) 36:281–291
https://doi.org/10.1007/s10896-020-00150-8

ORIGINAL ARTICLE

Perceptions of College Campus Alcohol and Sexual Violence Prevention among Students with Disabilities: "it Was a Joke"

Carla D. Chugani[1] · Jocelyn C. Anderson[2] · Rachael K. Richter[1] · Amy E. Bonomi[3] · Natacha M. DeGenna[4] · Zoe Feinstein[1] · Kelley A. Jones[1] · Elizabeth Miller[1]

Published online: 16 March 2020
© Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract

The purpose of this study was to understand perceptions of campus-based alcohol and sexual violence (SV) prevention programming among college students with disabilities to inform future development of prevention programs appropriate for the needs of these students. The study included semi-structured, qualitative interviews with 51 college students with disabilities who reported histories of SV recruited from a larger parent study investigating a brief universal intervention to reduce alcohol related SV involving 28 campuses across Western Pennsylvania and West Virginia. Interviews focused on college-related experiences of prevention programming, and experiences of health, disability, alcohol use and violence victimization. Data were analyzed using thematic analysis. Three themes emerged: (1) Students with disabilities described campus prevention programming as ineffective and irrelevant to their experiences, including referring to programs as "a joke," (2) Students wanted multi-dose, developmentally relevant content that directly addresses the complexities of their experiences with disability, alcohol, and violence, and (3) Students called for programing focused on engaging their interests. Our results point to the need to augment campus-based programming, with attention to the unique needs and relevant concerns of students with disabilities, within the broader context of campus prevention programming.

Keywords Students with disabilities · Sexual violence · Alcohol · Prevention

Introduction

Alcohol misuse and sexual violence (SV) are pressing public health concerns on college campuses. While much research is devoted to prevention research in each of these areas and the relationship between each (i.e., many campus sexual assaults occur in the context of alcohol use; Abbey 2002), the experiences of marginalized student groups at greater risk for SV, such as college students with disabilities (Findlay, Plummer, & McMahon, 2016), are often left out of such investigations. College students with disabilities (defined as a having an impairment that substantially limits one or more major life activities; "Americans with disabilities act," 2010) are a large, under-researched group representing up to one third of the college student population (American College Health Association 2016; Auerbach et al. 2018; U.S. Department of Education and National Center of Education Statistics 2016). The large majority of these students have a psychiatric or neuropsychiatric condition (e.g., attention deficit hyperactivity disorder [ADHD], learning disorder), with fewer having physical or sensory disabilities (e.g., cerebral palsy, hearing impairment; American College Health Association 2016). By the time students with disabilities arrive on campus, they have already experienced significant challenges. Nearly half of middle and high school students with disabilities meet criteria for multiple disabilities (e.g., ADHD and a mood or anxiety disorder; Mattison 2015). Though these students often receive support via individualized education plans (IEPs) in their early education, they face a difficult transition to college as they become responsible for obtaining their own accommodations and support services (Hadley 2011). College students with

✉ Carla D. Chugani
carla.chugani@chp.edu

[1] Adolescent and Young Adult Medicine, Department of Pediatrics, University of Pittsburgh School of Medicine, Pittsburgh, PA 15213, USA

[2] College of Nursing, Pennsylvania State University, State College, PA 16801, USA

[3] Children and Youth Institute, Michigan State University, East Lansing, MI, USA

[4] Department of Psychiatry, University of Pittsburgh School of Medicine, Pittsburgh, PA 15213, USA

disabilities also face a variety of marginalizing experiences such as social stigmatization, intimidation (Hong 2015), negative perceptions from faculty and advisors (Hong 2015; A. May and Stone 2010), and bullying (Kowalski et al. 2016).

In addition to the vulnerabilities created as students with disabilities transition to college, these students experience elevated rates of sexual violence (SV). Students with disabilities have exceptionally high rates of violence victimization, with 64% reporting an experience of physical or SV prior to college (Findlay et al. 2016). Women with disabilities are four times more likely to report SV than women without disabilities (Martin et al. 2006). In a study of recent experiences of SV among people with and without disabilities, 39% of the 1.27 million women who had reported being raped in the United States in the past 12 months reported having a disability at the time of the rape (Basile et al. 2016).

In tandem with risk for SV, it is critical to consider the role of alcohol, given that at least half of campus sexual assaults occur in the context of alcohol use (Abbey 2002). Unfortunately, a dearth of research investigates the needs of students with disabilities with regard to SV prevention programming on campus. A qualitative study of SV and intimate partner violence among college women with disabilities found that alcohol was a common facilitator of SV, and that perpetrators used both alcohol and the victim's disability to facilitate a sexual connection (Bonomi et al. 2018). While there is some evidence to suggest that college students with disabilities may binge drink less than their non-disabled peers (West et al. 2017), this work fails to address the intersections of SV and alcohol use and is limited to students who receive disability services and accommodations, a small portion of the overall population. Unfortunately, drinking and alcohol misuse among college students with disabilities specifically have not been widely examined in practice – an important step in developing programming suitable for campus-wide implementation and tailored to the experiences and needs of these students.

One challenge in conducting research with college students with disabilities is that relying on student samples recruited through campus disability services likely does not yield a representative sample, as many students do not register with disability services because 1) they do not need or want accommodations; 2) they do not realize that they are eligible for accommodations; 3) they cannot afford or access services needed to provide the requisite documentation of disability (e.g., a neuropsychiatric assessment to document ADHD can cost well over $1000 and is not often reimbursed by insurance); or 4) they do not identify (or want to be identified) as having a disability. Given this, as well as the fact that definition and assessment of disability can vary between studies and institutions, it is critical that research on alcohol use and SV among students with disabilities extend to include students who are not formally registered to receive accommodations and include attention to the elevated risk for SV victimization.

Finally, given the frequent co-occurrence of alcohol misuse and SV on campus, more attention is needed to develop trauma-informed prevention programming that is intersectional in nature, and inclusive of the needs of marginalized students with elevated risk. Campus alcohol prevention programs often target student groups at elevated risk for heavy drinking (National Institute on Alcohol Abuse and Alcoholism 2002; Wechsler et al. 2000a; Wechsler et al. 2000b). While these programs tend to address the health risks of heavy alcohol consumption and the risk of alcohol-related SV, they do not typically address exposure to violence or trauma that may underlie alcohol use (Substance Abuse and Mental Health Services Administration 2015), nor do they address the intersections of alcohol, SV, and disability. Similarly, programming for SV prevention, is often limited in scope, dose, and timing (DeGue et al. 2014); perhaps with a focus on meeting regulatory requirements (e.g. what is the definition of consent, who are mandatory reporters on campus, and what a "timely warning" is) rather than evidence-based prevention. These hour-long seminars have not demonstrated efficacy in decreasing SV (DeGue et al. 2014), nor do they begin to tackle the complex relationships between SV and physical and mental health, alcohol and drug use, or structural risk factors such as lack of stable housing or food insecurity. A key challenge in tailoring campus SV and alcohol prevention programs to better address the needs of students with disabilities is that it is unclear how they currently experience such programming and the extent to which it is relevant to their needs.

The purpose of the present study was to interview a heterogeneous group of students with disabilities (inclusive of both students who were and were not formally registered to receive accommodations for their disability) to elucidate their experiences of and feedback for improving campus-based SV and alcohol prevention programs. This study took place in the context of a larger parent study which investigated a brief universally delivered approach to reducing alcohol related SV on college campuses. As part of the parent study, students with histories of SV were recruited to participate in qualitative interviews. The present analysis includes students with disabilities who have experienced SV prior to or during college with the overall goal of allowing student experiences with campus-based alcohol and SV prevention programs to inform future development or refinement of prevention programs that are appropriate for and inclusive of the disability population.

Methods

Procedures and Participants

This study was conducted in the context of a larger parent study investigating a brief intervention to reduce alcohol-related SV on 28 college campuses across Pennsylvania and

West Virginia (Abebe et al. 2018). All study procedures were approved by the Institutional Review Board (IRB) at the University of Pittsburgh, and by the IRBs at each participating institution, as required. To ensure that participants did not feel coerced to answer any interview questions in order to receive payment, they were provided with their $50 gift card prior to the start of the interview. The interviewer explained that they could decline to answer any question, stop the interview at any time, or leave, without concern that this would result in loss of compensation. To increase accessibility and comfort among participants, we also arranged to conduct interviews in a private location on each campus or within our secure laboratory facilities. Funds for transportation and parking were also made available to participants as needed.

A subsample of students with disabilities ($n = 60$) from 13 different campuses participated in semi-structured qualitative interviews following completion of parent study survey data collection. All students interviewed had previously endorsed at least one lifetime experience of SV as well as a health condition that could qualify as a disability on their surveys from the parent study and were invited to participate in this qualitative study based on these two preliminary criteria. As interviews proceeded, the research team purposively sampled from the pool of potential participants with a focus on interviewing men, individuals with physical or sensory disabilities, and sexual or gender minority students, who were less represented in the overall sample.

After providing informed consent to participate in the interview, students were presented with a list of common health conditions/disabilities. The list of health conditions included examples such as: ADHD, bipolar disorder, deafness, mobility impairment, and seizures. Of the 60 students interviewed, nine did not endorse any disability condition, or endorsed a previous experience with one of the conditions but reported that it resolved during their childhood and was not relevant to their college experience; these students were excluded from the present analysis. In total, 51 students endorsed health conditions associated with impairment during college and were included in the present study (see Table 1 for participant characteristics).

The first and second authors, as well as two trained interviewers with substantial prior experience in discussing sensitive topics with adolescents and young adults, conducted face to face, audio-recorded interviews in private locations. Interviews lasted between 1 and 2 h each. Table 2 provides an overview of the topics in the interview guide used during the interviews. Notably, the purpose of these interviews was to gather experiences of programming across a wide range of campuses and therefore we did not collect information on specific programs (e.g., AlcoholEdu; Paschall et al. 2011). Rather, the focus of the interviews was centered on how students experienced programs (what they liked, didn't like, wanted more of, etc.) and how programs could be improved overall and in terms of inclusivity. Interviews also covered a broad range of topics not included in the present analysis, including history of disability and diagnosis, effects of disability on academic work and relationships, relationship and SV history, and use of alcohol.

Table 1 Participant demographics at parent study enrollment ($n = 51$)

	% (n)
Age	
18	23.5 (12)
19	25.5 (13)
20	27.5 (14)
21–23	23.5 (12)
Race	
Black or African American	3.9 (2)
White	78.4 (40)
Multiracial	17.6 (9)
Gender	
Male	15.7 (8)
Female	83.4 (42)
Other gender [a]	2.0 (1)
Any sex with same gender partner [b]	20.5 (9)
Year in school	
1st year undergraduate	25.5 (13)
2nd year undergraduate	33.3 (17)
3rd year undergraduate	21.6 (11)
4th year undergraduate	11.8 (6)
Other	5.9 (3)
Residence	
Campus residence hall	62.7 (32)
Fraternity or sorority house	3.9 (2)
Parent/guardian's home	3.9 (2)
Other	27.5 (14)
Member of [c]	
Fraternity/sorority	15.7 (8)
Sports team	15.7 (8)
Other campus group or organization	66.7 (34)
Disability type(s) [c]	
Physical/sensory	23.5 (12)
Psychiatric/mental health	66.7 (34)
Neuropsychiatric/learning disorder	41.2 (21)
Reported alcohol use at any time point during the study (12 months before or during)	
Yes	98.0 (50)
No	2.0 (1)
Reported binge drinking at any time point during the study (12 months before or during)	
Yes	98.0 (50)
No	2.0 (1)
Type(s) of sexual violence students reported experiencing [c]	
Unwanted sexual touching	90.2 (46)
Attempted unwanted sex	74.5 (38)
Unwanted vaginal sex	29.4 (15)
Unwanted oral sex	45.1 (23)
Unwanted anal sex	13.7 (7)
Unwanted penetration (e.g. with finger, object)	29.4 (15)

Percentages may not total 100 due to missing data

[a] Includes transgender, non-binary, and other gender responses

[b] For students reporting sexual activity at baseline, ($n = 44$)

[c] Response categories are not mutually exclusive

Table 2 Overview of the Interview Guide

Major topic areas	Question Exemplars
Disability history	• Tell me how [diagnosis] has affected you in college? • Tell me more about how you manage [diagnosis] while you have been a college student?
Relationship and sexual violence history	• How long did each relationship last? • Tell me a little about what that relationship was like? • Did any of your partners know about your disability? If not, did anything keep you from sharing it? • How, if at all, did [name of disability diagnosis] influence the situation (Physical/psychological abuse and sexual abuse violence)? • Did any of your partners use your diagnosis against you in any way? (If so, how?)
Context of alcohol use patterns	• Can you tell me about your experiences with alcohol? • How old were you when you drank alcohol for the first time? • What have your experiences with alcohol been? • How often do you feel like you drink too much or too often? • How has drinking affected you? Your health? [probe for health effects, disability diagnosis/management, academic performance, behavior changes (e.g., drinking to fit in)] • Have you ever done anything that you later regretted or did not want to do while drinking?
Reflections on campus sexual violence and alcohol related prevention programs	• Have you heard of or participated in any of these programs here on campus? If yes, what was your experience? • How relevant do you think these programs are for students with [disability diagnosis]? • As you think about the programming available to you, even back in high school or earlier, what would have made a difference for you? • Are there specific ways that interventions might be more attractive or comfortable for you to use, such as those that you can participate in online or through an app? What ideas do you have about how we could make sexual violence and alcohol intervention more relevant to students with disabilities? • If you think about the campus support services that are available to you (counseling, health clinic, disability services, advising, etc.), is there a particular staff member or service (e.g., the counseling center, disabilities office, etc.) that you would be most comfortable going to for help?

Statement of Reflexivity

The authors comprise an interdisciplinary group of cisgender female researchers whose collective goal is to improve the lives of marginalized and victimized young people and to advance knowledge and practice in the prevention of violence and trauma. We represent the fields of counseling, nursing, public health, psychology, epidemiology, adolescent medicine, and medical anthropology. Collectively, across two large public research universities, our team includes two postdoctoral scholars who have recently progressed to faculty positions, three university faculty members (including two with administrative roles as director of major departments/institutes), one graduate student, and one research assistant. While we comprise an all-female research team, our members include those from diverse racial, ethnic, and sexual orientation backgrounds, and we have collective experience both representing and facilitating conversations among those with diverse perspectives on university-level sexual violence prevention committees and in national settings. More personally, members of our team have experienced mental illness substantial enough to qualify as a disability under ADA and campus sexual assault, experiences which undoubtedly enrich and inform our approach to this research.

There are several ways in which our backgrounds have influenced the research. First, we chose to ask students about "unwanted sexual experiences" and "health conditions" as opposed to "rape" or "disability." These choices were informed by our substantial experience in talking with young people about sexual assault and health. Further, as we disclosed our professional backgrounds to interviewees (e.g., a sexual assault nurse examiner, SANE; an expert in collegiate mental health, etc.), this almost certainly influenced the way students perceived and responded to us during interviews. Last, the fact that we chose to conduct our research by listening to the voices and lived experiences of students with disability who have experienced SV from an intersectional approach seeking to understand how experiences such as SV, alcohol, health, and prevention programming may intersect and inform students' needs likely influenced the ways in which students responded to our questions.

Analysis

We conducted a thematic analysis informed by Braun and Clarke's six-phase process (Braun and Clarke 2006). We selected thematic analysis because our goal was to 1) identify a diverse set of themes that represent a range of experiences with and suggestions for improving SV and alcohol programming, and 2) provide guidance for developers and implementers of campus-based SV and alcohol prevention programming. To keep as close as possible to the needs and desires

of participants, we also adopted a somewhat more descriptive approach to data analysis (Sandelowski 2000). Interviews were professionally transcribed, and later quality checked and had identifying information (e.g. names, locations, dates) redacted by a research assistant. The resulting anonymized transcripts were uploaded to Dedoose, a secure, web-based qualitative data analysis platform (Sociocultural Research Consultants LLC 2018). The coding team consisted of the first two authors and two master's level research assistants trained in public health. An a priori codebook consisting of broad, descriptive codes was generated by the first and second authors to begin coding, with all transcripts being independently coded three times by at least two unique coders. The purpose of the a priori codebook to help the research team begin to cull the data and familiarize themselves with the transcripts, given the substantial volume of data (51 interviews lasting 1–2 h each), rather than to analyze the data. Coding proceeded inductively, with the whole coding team meeting weekly to discuss new codes, clarify questions, and resolve disagreements. Once the whole team agreed on a final codebook, all excerpts from the initial coding were re-reviewed an additional three times by at least two unique coders to ensure that all final codes had been applied properly (see Table 3 for final themes and associated codes). The coding and review process were developed to comprehensively review and attend to the large amount of data in this analysis rather than as a measure of inter-rater reliability. Finally, our analysis was grounded in a constructivist approach, as the primary goal was to have students' reflections on their lived experiences specifically guide and inform prevention and intervention on college campuses.

Table 3 Final Themes and Associated Codes

Theme 1: Students with disabilities described campus programming as ineffective and irrelevant to their experiences.	
Experiences	• Black and White Approach • Discussion Based Programming • Gender/Sexual Identity Issues • Good Information • Lack of Focus on Drug Use • Mandatory vs. Optional • Not Relevant/Relatable • It was a Joke • Online is Not Engaging • Timing Issues
Theme 2: Students wanted multi-dose, developmentally relevant content that directly addresses the complexities of their experiences with alcohol, violence, and disability.	
Content Suggestions	• Disability Specific • Help and Resources • Humor as Trivializing • Talk About It
Format/Timing Suggestions	• Don't Just Do It Once • Required Class • Start Earlier
Theme 3: Students called for programing focused on engaging and maintaining their attention.	
Engagement Strategies	• Connecting to Policy • Engaging Presenters • Hard to Miss Messaging • Humor is Positive • Incentives • Memorable Events • Real Stories/Campus Specific

Results

Experiences of Campus-Based Programming and Suggestions for Improvement

All students in our sample reported previous exposure to campus-based prevention programming. When asked, students reported they had participated in universal campus-based prevention programming only, with disability-specific issues rarely discussed. Based on these experiences, participants recommended changes in programming content, format, and engagement, including programming tailored to students with disabilities.

Theme 1: Students with Disabilities Described Campus Programming as Ineffective and Irrelevant to their Experiences Participants had generally negative experiences of campus-based alcohol and SV programming, noting reliance on black-and-white, abstinence-based approaches that rarely accounted for the realities of collegiate life. There were few opportunities for discussion and interaction overall, which, if available, may have enhanced the inclusivity of programming by providing space for students with disabilities to raise issues relevant to their own experiences and needs. One participant said,

> Everything felt way too absolute. For example, I'm not necessarily in the agreement that, if someone has been drinking, they can't consent to sex. I don't think that that makes that much sense. I think it depends on the context. That's not an absolute at all…. when a statement that's just like, no, this is always wrong is made, if I don't agree with it, it makes the whole thing less effective.

Participants in the alcohol and SV programming tended to indicate the programming was not relevant or relatable, describing programing as "a joke" either because they did not take it seriously or because their peers did not. Students felt that programming was not representative of their more complex and nuanced real-life experiences of SV or disability and instead focused on stereotypes or simply did not address the issue at all. One participant explained,

> Even the posters you see around always depict a very stereotypical situation of getting drunk… Maybe the sexual assault that happened wasn't at a party where someone was putting a beer in my face. I would like a poster that looks like what happened to me. Something that is just in a home drinking with a good friend.

When one participant was asked how relevant alcohol programming was for those with a mental health disorder, she said,

> The way they're taught now, I don't think they're relevant at all because it didn't touch upon drinking—or alcohol is a depressant. They might have mentioned it, but I don't remember—that's not something that stuck with me. I kinda wish they would.

Another student explained that,

> All of us took it as a joke, though. We were all kind of like, this is stupid, whatever. This isn't gonna stop me from drinking. Most people went drunk to the thing.

Participants also found that online alcohol and SV prevention programming was boring, repetitive, and forgettable. An added challenge with such programs is that they are often required at the beginning of the academic year when students may be more likely to rush through them. The theme of not taking the modules seriously, rushing through the content as quickly as possible, or even creating drinking games out of the programs continued in students' discussions of online programming. One student explained,

> We all had to do [name of online alcohol program for college students] our freshman year, and that was useless, cause that would tell you how many drinks you could have before you got to this BAC [blood alcohol concentration], and…we would all just play games, and see our measurements, like, 'How many drinks could I have before I died?' It was very comical, and not very serious, and could just click, and click, and as long as you filled it out, you passed.

However, for students with less experience with drinking and less previous alcohol education, some of the information was useful—such as information regarding how to make informed choices regarding their own alcohol consumption, sexual behavior and sexual health, and strategies for assisting others experiencing an alcohol emergency, sexual harassment or assault, or relationship abuse. One participant said, "The whole, laying someone on their side, and how to put their arm, that's been really helpful."

Participants also took issue with gender-specific programming or a lack of attention to the needs of sexual and gender minority students with regard to SV education. They were unhappy with heteronormative, gendered expectations of violence (e.g., men as perpetrators, women as victims), and objected to programs that separated students by gender. A male participant explained,

> It's just the scenarios were always boy assaulting girl or boy doing whatever to girl. It made us feel like terrible people, even though we weren't assaulting everybody. It sounded like she [the educator] was preaching to us, telling us how we need to be.

Conversely, some students felt programming needed to be more geared toward teaching men acceptable behavior in relationships and that focusing on teaching women how to avoid being assaulted placed too much onus on victims. Another explained,

> There's always that whole consent is not this, this, this. It's only like a yes…. I feel like that kind of information is more helpful in having guys understand a girl coming into a room with you is not consent…

Participants suggested strategies to increase effectiveness, including small-group discussions to foster more openness, engagement, comfort, and in-depth discussion of complex, intersecting and nuanced topics. These strategies suggest that students want to engage more deeply with prevention programming and need space to converse with both educators and peers to increase their comfort with the topics, ask questions, or raise important issues not directly addressed by the program content. One participant explained the benefits of a small group,

> It's just kinda anxious, and a smaller setting would be more comfortable, and you'd feel more comfortable asking questions. You're not just trying to get in and out, where they just cattle us in, start the video, cattle us out.

Theme 2: Students Wanted Multi-Dose, Developmentally Relevant Content that Directly Addresses the Complexities of their Experiences with Alcohol, Violence, and Disability

Participants expressed their support for improving campus programming to address how SV, dating violence, mental health, and diversity issues intersect with alcohol and substance use through suggestions for both content and format. When asked about how campus programming could address these intersections, one participant said,

> I wish they would make [mental health issues] more known, because I think it's something a lot of people

> go through…. For me, I thought I was fine, and meanwhile, I had been going through this struggle for so long. That would have been so nice to have… somebody to be like, 'If you're experiencing this, this, this, and that, that's not normal. There are ways to get out of that and there are ways to feel better.

Students wanted programming to increase awareness of disabilities and available resources for all students, feature disability-specific speakers, and incorporate how disability and mental health concerns intersect with substance use, SV, and partner violence. Taken together, the feedback from students suggests that prevention programming delivered on a specific topic (e.g., alcohol, SV) tends to miss the mark for because it fails to address the ways in which these topics intersect with so many different areas of their lives. As one student explains,

> I think that there needs to be programs geared toward teaching people how to have healthier vices and understanding that when all these different things overlap it's hard to just break it down to one issue and address it as a singular issue…. I also think that… they need to be more accessible to students, especially students who are dealing with all these overlapping problems, and know how to address them, and not just kind of shoo them off in a way to [local hospital] down the road.

Students wanted campus resources to be more accessible (e.g., easy to get an appointment quickly, especially for counseling services) and frequently and commonly advertised—to encourage and destigmatize their usage. They wanted information and resources related to disability qualifications for accommodations, seeking help in an alcohol emergency without disciplinary repercussions, seeking safe transport home late at night, and options for actions and help seeking after experiencing sexual assault. Overall, a challenge appears to be that while many resources are available on campus, information about these services as well as what accessing each entails do not reach students, leaving them with few options when a crisis or issue arises. As one student described,

> I think that still just the stigma of trying to get help is a lot, so some magical power to remove the stigma… or maybe just more information for people who've experienced these things, like what happens when you do make a report, or what happens when you go for a counseling service? …so really more information and more transparency around what happens.

While mental health was a common concern among students in our sample, this was not just limited to accessibility of in-person professional counseling. Rather, students emphasized the importance of information and options for seeking and receiving help quickly for mental health concerns, including chat-lines and peer groups that may increase their likelihood of reaching out for help:

> Maybe just have that person who you know is a professional that you can reach out to through text message. If you feel as if you have been victimized or you feel as if you're in a bad situation mentally, or whatever the case may be, instead of calling up your [best friend] who might have absolutely no idea how to address the situation, being able to just text someone, almost have a safe line buddy. You don't have to call a hotline. You don't have to actually set up an appointment with that person, because like I said, I've thought about setting up appointments, but how many…have I actually set up? Not many.

Students also indicated that the use of humor and gimmicks in programming is inappropriate and delegitimizes program effectiveness. While the experience of students tends to be that their peers do not take prevention programming seriously, students understand the importance of taking these topics seriously. When presentations include use of humor, there is a risk of modeling for students that laugher and joking about alcohol misuse and/or SV is acceptable. One student said,

> Don't try to make the name a gimmick. Don't try to play at our interests. If it's gonna become a mandatory event, you can call it whatever the heck you want. Doesn't have to be relatable. Just make it serious. Let's make this a serious discussion. If one kid giggles, kick him the heck out of there. Don't let everyone perpetuate this ridiculous atmosphere of, 'This isn't serious. We all know not to do that,' because obviously, people are out there doin' it.

Participants also offered ideas for improving the format and timing of alcohol and SV programming. They noted the need for programming related to substance use, SV, healthy relationships, intimate partner violence, and sexual health to start earlier in life, before college or even before high school, to build a foundation of knowledge before facing these issues in college. Students also suggested programming not only be done at the start of college freshmen year, but repeated across the college career to reach students during times of increased need (e.g., when they turn 21) and continue to remind them of available resources. These suggestions indicate that even if programming is strong in terms of the content provided, failure to account for the timing of program delivery may reduce overall effectiveness. One participant explained,

> There's just so much freshman year that it's overwhelming that the last thing you think about is, oh alcohol and sexual abuse and mental health and physical health. You completely just wipe all that out because you're just so busy trying to get your bearings. I feel like that needs to be something that needs to be reiterated.

Students mentioned the idea of creating a school-wide required class to address these complex, intersecting issues in a serious manner, allow for more in-depth discussion of the material, and to increase awareness of resources, policies, and protocols.

Theme 3: Students Called for Programing Focused on Engaging and Maintaining their Attention

Participants noted several techniques to increase engagement with alcohol and SV programming. These included engaging presenters, real stories, and use of what they perceived to be as *appropriate* humor (such as the Tea video used to teach consent; E. May 2015) in contrast to negative feedback noted in theme two regarding humor that was trivializing). Engaging and relatable presenters are likely individuals who acknowledge the realities of student life as opposed to abstinence only approaches. For example, one student appreciated a particularly relatable presenter used a harm reduction approach,

> He's very funny, he makes the conversation very relatable, and very casual, not like, we're telling you to never drink or never have sex, we're just trying to tell you that if you're gonna do it, we really want you to be safe about it. It's a really nice perspective, 'cause obviously these things happen on a college campus.

Another method of engaging students was the use of personal stories related to substance use or sexual assault or information that was specific to the campus or local area as particularly impactful in programming. One participant explained,

> I think keeping the issue as close to campus as possible, keeping the facts and the statistics about [university's] campus, especially, is the most helpful thing….I think as a whole, college students are definitely aware that this stuff happens, but until it happens to you or someone you know, it's just not a relevant topic.

They also appreciated open discussion of policies specific to their campus or location (e.g., amnesty policies), and called for increased transparency of information about possible disciplinary consequences of alcohol use and sexual assault to make informed decisions about their health, safety, and education.

Another technique used to ensure students received information about available services was placing information in hard to miss locations (e.g., well-placed targeted posters, fliers, and magnets) in high traffic locations and distributed through student groups. One participant said,

"I don't know, you're waiting for an elevator or something, you see that, you'll read it. It's on your mind. Maybe you won't listen to it, but at least you'll think about it, and it'll be in your memory."

Participants also emphasized the use of incentives (tangibles such as food, gift cards, condoms, and prizes) in increasing their motivation to attend, engage with programming, and retain content. Incentives were not only a method for reinforcing attendance but also a useful tool for ensuring that students continue to be exposed to important information over time. For example, one student shared their experience with a free magnet from an alcohol prevention program,

> Fridge magnets, y'all should definitely make fridge magnets 'cause I still have my little alcohol poisoning fridge magnet. It's still on my fridge. It says you can't give consent if you're drunk, high, asleep or too afraid to say no.

Discussion

Our results reflect the complex and diverse needs of students with disabilities as a broad campus population. While some of our study findings are more specific to the disability population (e.g., addressing the intersection of mental health, destigmatizing use of campus services, and increasing accessibility of services), the feedback students provided tended to mirror the experiences of the wider student population. Individuals with disabilities have a long history of oppression, discrimination, and desexualization (the erroneous assumptions that people living with disabilities are asexual; Shuttleworth and Mona 2002). In particular, the desexualization of people living with disabilities leaves little room for discussion and research related to educating young people with disabilities about healthy sexuality, relationships, and help seeking – an important and pressing need given their elevated rates of SV victimization (National Council on Disability 2018). Thus, our finding that in many ways students with disabilities express the same needs and desires as their non-disabled peers (Bonomi 2017), is important, meaningful, and counter to the stereotypes about disability that contribute to continued marginalization and isolation of this population.

Student experiences of campus-based prevention programming tended to be negative and reflected their concerns about the lack of attention to content that would be relevant and responsive to their needs as students with disabilities, such

as information about the effect of alcohol on mental health symptoms. Students reported that there was a focus on easy to deliver or brief programs that are viewed as "a joke." Although online content focused on the basics of health hazards of alcohol use and foundational definition of sexual consent is easy to deliver in universal programming, our results suggest that this programming misses the mark because it fails to address college students' real-world experiences of the intersections of drinking, relationships, violence, and health (including mental health). For many students in this sample, addressing and including their real-world experiences calls for a shift toward programming that allows for discussion and dialogue between students and well-trained, knowledgeable facilitators in a safe environment that prioritizes the gravity of the topics at hand.

Regarding disability, students noted that basic information such as the effect of alcohol on mood had not been addressed in their prevention program experiences, and they wished that it would have been. The students in this sample primarily had psychiatric or neuropsychiatric conditions and thus, the lack of focus on how alcohol and/or SV could affect one's mental health was a recurrently identified gap. In addition to their vulnerability to SV, students with disabilities have high rates of suicide ideation and attempts, non-suicidal self-injury, and anxiety (Coduti et al. 2016). Given this, programs tailored to meet the needs of these students should also include an intentional focus on mental wellness, with frequent reminders about warning signs of more serious issues and accessible resources for help on- and off-campus. Students may need assistance, for example, learning to differentiate normal stress from more serious anxiety, depression, or other symptoms to feel comfortable or confident in their decisions about when to seek services.

Students also expressed a desire for more inclusive programming, especially those that portray different gender representations of perpetrators and victims. In addition to excluding the experiences of sexual and gender minority students, campus-based prevention programming situated within a heteronormative viewpoint fails to address the ways in which SV is normative within our broader societal culture and embedded within larger civil and human rights infractions involving sexism, racism, homophobia, xenophobia, ableism, and classism (Bonomi 2018; Rothman 2018). Students seemed well aware of these inequities and the challenges of addressing these intersections, but they lack opportunities to engage in open and knowledgably facilitated discussions about SV with peers and faculty.

Our findings were consistent with findings from what has been noted to "work" for behavior change in systematic reviews of SV and alcohol use education programming. Addressing contextual factors important to individuals, having sufficient time to cover important and complicated concepts with well-trained facilitators, and theory-driven content and educational strategies are all important to promoting any behavior change (DeGue et al. 2014; Reid and Carey 2015; Scott-Sheldon, Carey, Elliott, Garey, & Carey, 2014), and our results suggest that students with disabilities want prevention programming that is more detailed and relevant to their experiences. Students in our sample also described the importance of avoiding gimmicky program names, having knowledgeable facilitators, and making programs mandatory (with penalties for those who do not take the material seriously) or delivering information through required coursework. Given the range of public health risks facing college students, the idea of a required health course for all students may be one way to cost-effectively deliver a substantially higher dose of prevention and health promotion programming. Such courses would be paid for as tuition credits required for completion by all students (e.g., freshman seminar), and would also provide ample time for small group discussions, tailoring of materials to be appropriate and inclusive of local community and cultures, and more options for engaging students deeply in the content (e.g., through required reading, assignments, etc.), all strategies that have demonstrated promise in reducing SV, alcohol use or both in prior work (DeGue et al. 2014; Scott-Sheldon et al. 2014). Evaluation of such coursework should be an additional, critical component to determine how course content affects students' understanding and reactions to the material, their equity actions towards others over time, and whether this has any impact on drinking and SV.

Finally, while generalizability is not a key goal of qualitative research, a limitation of this study is that the sample was predominantly White and included few participants with physical or sensory disabilities. More research is needed to include the experiences and perspectives of racially and ethnically diverse students with disabilities with a heterogeneity of disabilities. Second, it is likely that some of the ideas presented would vary by participant demographics (e.g., the idea that current programming overemphasizes men as perpetrators), however, a comparative analysis by participant demographics was beyond the scope of the present study. Third, the screening question used to recruit students with disabilities may have failed to capture students who experienced substantial impairment in functioning but did not endorse one of the specific conditions included on the survey. Fourth, due to the number of study sites and student inability to recall the names of prevention programs in which they participated, we were not able to provide details on which programs students provided feedback for, which would have further contextualized the data. Last, the interview questions related to campus alcohol and SV prevention programs experienced by participants came at the end of a very long interview covering sensitive topics. As such, it is likely that participants were fatigued and may not have provided as much detail as they might have had these questions been asked earlier in the interview.

Despite these limitations, our research offers an important step forward in understanding how typical universal campus alcohol and SV prevention programs are experienced and perceived by students with disabilities. In addition, it provides important insight into the continued challenges of intervening on alcohol use and SV observed on college campuses across the nation. Some college campuses have begun to include both online programs coupled with more in-depth, systematic, and proactive prevention programming (Bonomi 2017). Our results highlight the critical need to refine alcohol and SV programming to better reflect the experiences of students with diverse experiences and needs. Students with disabilities may now represent up to one-third of students on campus, and many experience serious mental health concerns, another rising challenge faced by college campuses (American College Health Association 2016). More research is needed to develop relevant programming capable of addressing the complexities of students' lived experiences, which are often quite different from common stereotypes of college drinking (e.g., overt peer pressure) and SV (e.g., being violently assaulted by a stranger).

Funding Disclosures This research was supported by the following grants from the National Institutes of Health: R01AA023260 (PI: Miller), R03AA025780 (PI: Chugani), T32HD087162 (PI: Miller), and K23AA027288 (PI: Anderson).

Compliance with Ethical Standards

Conflict of Interest The authors have no conflicts of interest to disclose.

References

Abbey, A. (2002). Alcohol related sexual assault: A common problem among college students. *Journal of Studies on Alcohol Supplement, March, 4*, 118–128. https://doi.org/10.15288/jsas.2002.s14.118.

Abebe, K., Jones, K., Rofey, D., McCauley, H., Clark, D., Dick, R., et al. (2018). A cluster-randomized trial of a college health center-based alcohol and sexual violence intervention (GIFTSS): Design, rationale, and baseline sample. *Contemporary Clinical Trials, 65*(Feb.), 130–143. https://doi.org/10.1016/j.cct.2017.12.008.

American College Health Association. (2016). *American college health association - National College Health Assessment II: Reference group executive summary fall 2015*. Hanover, MD: American College Health Association.

Americans with disabilities act, https://www.ada.gov/regs2010/titleIII_2010/titleIII_2010_regulations.htm#a301, Pub. L. No. 110–325, 36.105 Stat. (2010).

Auerbach, R., Alonso, J., Axinn, W., Cuijpers, P., Ebert, D., Green, J., et al. (2018). Mental disorders among college students in the World Health Organization world mental health surveys. *Psychological Medicine, 46*(14), 2955–2970. https://doi.org/10.1017/S0033291717001039.

Basile, K., Breiding, M., & Smith, S. (2016). Disability and risk of recent sexual violence in the United States. *American Journal of Public Health, 106*(5), 928–933. https://doi.org/10.2105/AJPH.2015.303004.

Bonomi, A. (2017). *Sexual violence advisory committee (SVAC) toolkit: SVAC's synthesis of themes collected in 2016–2017 from the campus community*. Michigan State University Retrieved from https://gencen.isp.msu.edu/files/6115/2173/6336/svac-spring-2017-toolkit-revised-april.pdf.

A, Bonomi (2018). Rethinking campus sexual Assault: We Must Be Leaders in Anti-Bias Practices, Civil Rights and Human Rights. *Journal of Family Violence*. doi:https://doi.org/10.1007/s10896-018-9994-z, Rethinking Campus Sexual Assault: We must Be Leaders in Anti-Bias Practices, Civil Rights and Human Rights.

Bonomi, A., Nichols, E., Kammes, R., & Green, T. (2018). Sexual violence and intimate partner violence in college women with a mental health and/or behavior disability. *Journal of Women's Health, 27*(3), 359–368. https://doi.org/10.1177/1077801218787924.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–101.

Coduti, W. A., Hayes, J. A., Locke, B. D., & Youn, S. J. (2016). Mental health and professional help-seeking among college students with disabilities. *Rehabilitation Psychology, 61*(3), 288–296. https://doi.org/10.1037/rep0000101.

DeGue, S., Valle, L., Holt, M., Massetti, G., Matjasko, J., & Tharp, A. (2014). A systematic review of primary prevention straties for sexual violence perpetration. *Aggression and Violent Behavior, 19*(14), 346–362. https://doi.org/10.1016/j.avb.2014.05.004.

Findlay, P. A., Plummer, S.-B., & McMahon, S. (2016). Exploring the experiences of abuse of college students with disabilities exploring the experiences of abuse of college students with disabilities. *Journal of Interpersonal Violence, 31*(17), 2801–2823. https://doi.org/10.1177/0886260515581906.

Hadley, W. M. (2011). College students with disabilities: A student development perspective. *New Directions for Higher Education, 154*(Summer), 77–81.

Hong, B. S. S. (2015). Qualitative analysis of the barrier college students with disabilities experience in higher education. *Journal of College Student Development, 56*(3), 209–226. https://doi.org/10.1353/csd.2015.0032.

Kowalski, R. M., Morgan, C. A., Drake-Lavelle, K., & Allison, B. (2016). Cyberbullying among college students with disabilities. *Computers in Human Behavior, 57*, 416–427 https://doi.org/10.1016/j.chb.2015.12.044.

Martin, S., Ray, N., Sotres-Alvares, D., Kupper, L., Moracco, K., Dickens, P., et al. (2006). Physical and sexual assault of women with disabilities. *Violence Against Women, 12*(9), 823–837. https://doi.org/10.1177/1077801206292672.

Mattison, R. (2015). Comparison of students with emotional and/or behavioral disorders as classified by their school districts. *Behavioral Disorders, 40*(3), 196–209. https://doi.org/10.17988/0198-7429-40.3.196.

May, E. (Writer). (2015). Tea consent. In B. S. Studios (Producer).

May, A., & Stone, C. (2010). Stereotypes of individuals with learning disabilities: Views of college students with and without learning disabilities. *Journal of Learning Disabilities, 43*(6), 483–499. https://doi.org/10.1177/0022219409355483.

National Council on Disability. (2018). *Not on the Radar: Sexual Assault of College Students with Disabilities*. Retrieved from https://ncd.gov/sites/default/files/NCD_Not_on_the_Radar_Accessible.pdf

National Institute on Alcohol Abuse and Alcoholism. (2002). *A call to action: Changing the culture of drinking at U.S. Colleges*: National Institutes of Health, U.S. Department of Health and Human Services.

Paschall, M., Antin, T., Ringwalt, C., & Saltz, R. (2011). Effects of AlcoholEdu for college on alcohol-related problems among freshman: A randomized multicampus trial. *Journal of Studies on Alcohol and Drugs, 72*(4), 642–650. https://doi.org/10.15288/jsad.2011.72.642.

Reid, A., & Carey, K. (2015). Interventions to reduce college student drinking: State ofthe evidence for mechanisms of behavior change. *Clinical Psychology Review, 40*(Aug.), 213–224. https://doi.org/10.1016/j.cpr.2015.06.006.

Rothman, E. (2018). Preventing sexual violence on campus in the U.S.: Four Thought Experiments. *Journal of Family Violence.* doi:https://doi.org/10.1007/s10896-018-9982-3, Preventing sexual violence on campus in the U.S.: Four thought experiments.

Sandelowski, M. (2000). What ever hapened to qualitative description? *Research in Nuring & Health, 22*, 334–340.

Scott-Sheldon, L., Carey, K., Elliott, J., Garey, L., & Carey, M. (2014). Efficacy of alcohol intervention for first year college students: A meta-analytic review of randomized controlled trials. *Journal of Consulting and Clinical Psychology, 82*(2), 177–188. https://doi.org/10.1037/a0035192.

Shuttleworth, R., & Mona, L. (2002). Disability and sexuality: Toward a focus on sexual access. *Disability Studies Quarterly, 22*(4), 2–9.

Sociocultural Research Consultants LLC. (2018). Dedoose version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data. Retrieved from www.dedoose.com

Substance Abuse and Mental Health Services Administration. (2015). Trauma-Informed Approach and Trauma-Specific Interventions. Retrieved from https://www.samhsa.gov/nctic/trauma-interventions

U.S. Department of Education & National Center of Education Statistics. (2016). Digest of educational statistics, 2014. Retrieved from.

Wechsler, H., Kowalski, R. M., Lee, H., & Dowdall, G. W. (2000a). Environmental correlates of underage alcohol use and related problems of college students. *American Journal of Preventive Medicine, 19*(1), 24–29. https://doi.org/10.1016/s0749-3797(00)00163-x.

Wechsler, H., Lee, J. E., Kuo, M., & Lee, H. (2000b). College binge drinking in the 1990s: A continuing problem. *Journal of American College Health, 48*(5), 199–210. https://doi.org/10.1080/07448480009599305.

West, S., Graham, C., & Temple, P. (2017). Rates and correlates of binge drinking among college students with disabilities. *Public Health Reports, 132*(4), 496–504. https://doi.org/10.1177/0033354917713470.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.